



A modern masterpiece: Harmonising building systems to provide effortless control



Bright and green

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Sign of the times

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Big and clever

Residential extension inspires occupants to embrace smart home technology



Bigger and smarter

An extension of this home provided a gateway to embrace smart home technology and whole-home integrated control. **Seán Holland** speaks to Smart Life AV to get the low down on a stunning residence.

Renovations are not always easy for custom installers, with physical building constraints posing challenges to seamless technology integration. The ability to adapt and create a home that overcomes physical issues and provide the best possible solution is what makes a professional integrator key. Problem solving on the fly and creating a solution-

based outcome for the homeowner is what sets a skilled integrator aside.

This home in Northwood, UK was no different. The homeowner had built the property about five years ago and at that stage, apart from some basic networking hadn't really dived into smart home technologies.

The prospect of renovation and extension sparked the idea of richer technology integration too and the owners got in touch with integrator Smart Life AV, knowing the integrator from work previously undertaken. The client was a family with two kids, aiming to create a fully immersive home that fitted with the aesthetic of the house.

An initial challenge faced by the integration team was the homeowners were still contemplating options and

weren't fully decided on exactly what they wanted with their ideas morphing throughout the project. Smart Life AV collaborated with the interior design team at NS Interior Design and the client to get a clear understanding of the desires of the homeowner, as well as provide its expert opinion to settle on positive solutions.

Mike Ranpura, director of Smart Life AV, said: "There's a fine balance in projects where you have to synchronise your professional experience with what the client wants."

The aim for any Smart life AV project is always the same, with the company adhering to its motto: "we make your home an experience". In the case of this home, the experience is in the minutia, upgrading the smaller details that sometimes go unnoticed but add to the overall ease and comfort in a home.

Ranpura says: "[The clients] built an extension to allow them to expand the master bedroom and add an en-suite, walk-in wardrobe and make up area. Below the new master suite is a new dining room. The new areas are where we

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implemented a lot of the technology. At the same time there was an old garage at the front of the property, that got ripped down and became a car showroom and a gym with what will become a media room on the mezzanine floor.”

Smart Life AV started off by installing solid networking infrastructure throughout the home based on a Draytek router and Luxul switches. Ubiquiti WiFi serves the whole home, and Domotz network monitoring software provides device monitoring and management.

New Sony TVs paired with Sonos Arc sound bars were installed in the master bedroom and kitchen. A third Sony TV was installed in the gym and repurposed the client’s Sonos Playbar. Content is served from a Sky Q box and Apple TV 4K. All TVs were mounted

with Future Automation PS TV brackets, while Smart Life AV opted for a mix of brackets to mount the soundbars: a Future Automation USM-ARC Sonos Arc bracket and a Sanus WSSAWM1 Sonos Arc bracket. A Future Automation WB30 wall box ensured the gym TV sat flush against the wall whilst keeping an Apple TV hidden away behind.

The homeowners already owned a number of Sonos speakers and amplifiers and were happy with the system so they were kept. Smart Life AV integrated Crestron Home with the existing Sonos system and expanded it, adding more amplifiers. Crestron Reference series in-ceiling speakers made by Origin were added to the renovated areas of the home. Smart Life AV used Origin Acoustics unique speaker pre-wire kit

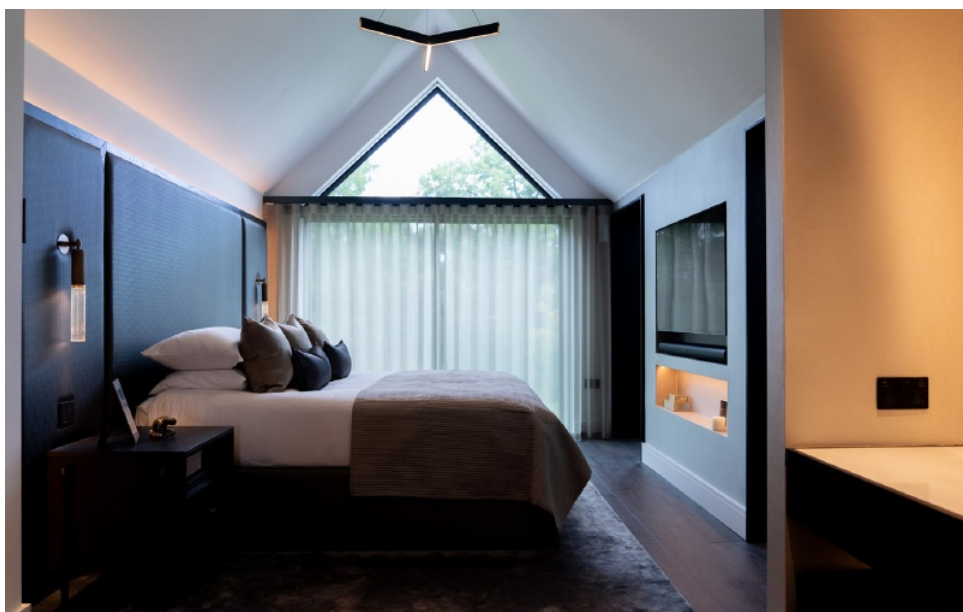
to allow for future speakers to be added without any mess.

The multi-room audio is served from the home’s two Sanus racks: one in the garage with room for expansion for when the new media room is completed, and one in the utility room for the main section of the house. Rounding off the audio system, Bowers & Wilkins AM1 outdoor speakers were added to the garden.

Crestron control was selected for the house and it extends beyond entertainment to handle the HVAC, lighting and other environmental systems. Smart Life AV chose Crestron Home OS to deliver tailored, centralised and accessible control to the whole family. In addition to app control, the family also have Crestron TSW-1070R touch panels and Crestron TSR-310 remotes.

Lighting is a mix of Ornluna downlights, Foss LED tape and the client’s existing Philips Hue coloured lights. In addition to Crestron control options, lights can be controlled with, at the specific request of the client, Black Nova Alba keypads. The Black Nova keypads feature a stunning modern design that the client felt elevated the space with full backlight colour customisation options. Some lighting scenes are automated with the help of Crestron PIRs.

Behind the scenes three Future Automation panels house a variety of Crestron mains dimming, 0-10V dimming and switching lighting control modules with panel wiring accessories from Wago





and Cablecraft.

“You try and push yourself on every project, and on this one we changed the way we wire lighting panels, using Wago terminal blocks and coming up with our own panel wiring scheme,” says Ranpura. “We followed a scheme for labelling, it’s all colour coded. It looks professional, provides a clean finish and it’s really clear for anyone working on the project. We’ll continue to use this approach on our next installation.”

The home’s gate, garage door, electric towel rail, extractor fan and mirror demister pads are all controlled through the Crestron system.

Ease of control is paramount to the success of a smart home system, and

this has been achieved with the tight integration of the Crestron system. For example, the AC, TV, blinds, curtains and lighting can be controlled from a bedside keypad. Elsewhere automating multiple functions from actions or at the touch of the button adds to a positive experience for the home’s occupants. This can be seen in the en-suite via the “Shower” scene: when the client wants to have a shower, the demister pad switches on to demist the mirror, the extractor fan starts running and the towel rail heats up to provide freshly warmed towels. However, When the en-suite is being used for other purposes these things do not turn on to conserve energy.

“It’s all these little touches in the



way we programme things and make it an experience to live in that make the difference,” says Ranpura. “Programming can also contribute to energy-efficiency with blinds automatically closing at night to retain temperature, heating only coming on when needed and smart lighting improving efficiency of the lighting systems.”

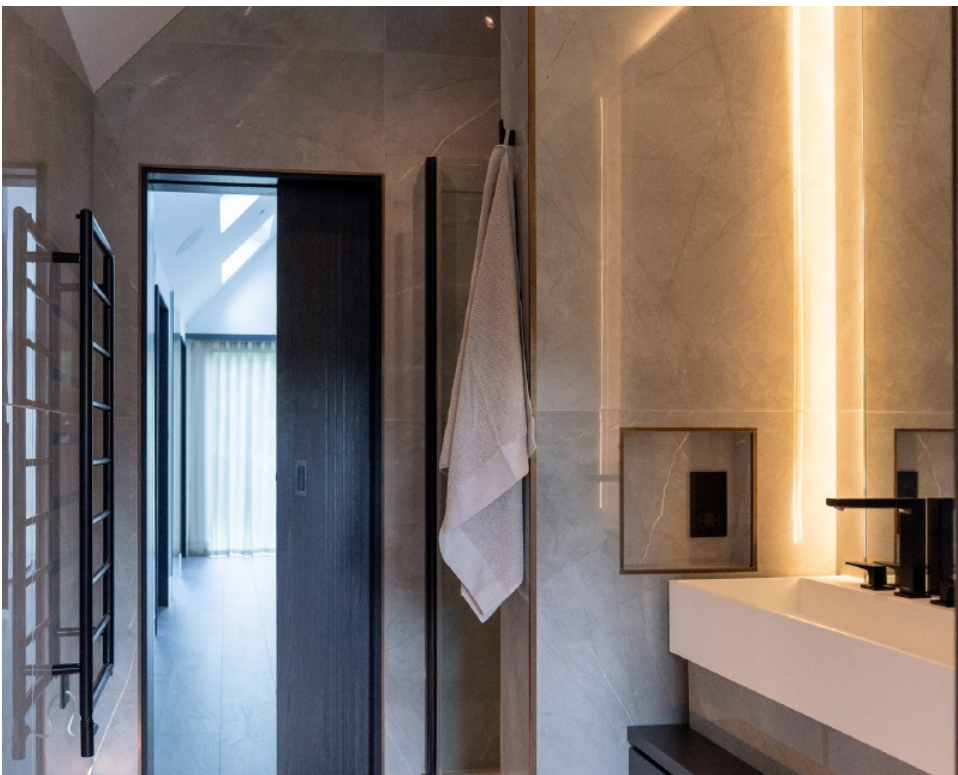
Smart Life AV turned to CoolAutomation for its CoolMaster bridge to allow it integrate Crestron control with the HVAC system.

“We were going to use Crestron blinds,” continues Ranpura. “However, in the master bedroom there’s a triangle-shaped window and we found we couldn’t. Instead, we integrated bespoke blinds powered by Somfy motors into the Crestron system. The curtain tracks are driven from Crestron motor modules.”

Security also fell within the remit of Smart Life AV’s work with the team installing an Ajax alarm system for perimeter protection, Hikvision CCTV cameras and recorder, and a GJD outdoor PIR to trigger external lighting.

The equipment in the home is protected with SurgeX surge protection and power conditioning kit, while IP controlled power distribution is handled by a Gude 8041-1 unit.

Smart Life AV will return to this project to complete the media room, a home cinema where the family can hang out and enjoy a film, or friends can be entertained on an L-shaped sofa. The media room will be located above the garage and plans are in place to install an Epson ultra-short-throw projector and Paradigm surround sound as well as a 2.5m-wide screen.



Smart Life AV usually recommends brands it's familiar with, as reliability and follow-up care is a large part of the job. This was the first major project that Smart Life AV used Crestron Home and Ranpura says this was a learning curve.

The system itself is new and a developing platform, so it took time to understand the troubleshooting and bug support. describes this as "stepping out of your comfort zone". The extra time was to understand the nuances Smart Life AV would ordinarily be familiar with in other systems.

But the investment in time paid off. The Crestron interface is modern and aesthetically pleasing, ideal for the style of the home being integrated. An advantage of integrating with a new system is that system is now added to Smart Life AV's repertoire, and the integrator will build on the knowledge gained this installation to install it in future projects.

The work for Smart Life AV is never complete in a smart home, in fact most of

its work comes in the follow up support or aftercare. Ranpura says: "Aftercare is looked at in two ways; proactive and reactive." Proactive are the steps that see Ranpura's team log into the system remotely, consistently maintaining the products and running tests, installing

firmware updates and patching. Reactive aftercare comes when the homeowner has a problem, this could be with any aspect of the installation, the blinds may not be working, or they are having an issue with the interface; Smart Life AV will then be on hand to resolve the issue.



Tech-Spec

- AJAX Alarm System
- Apple TV 4K
- Black Nova Alba keypads
- Bowers & Wilkins AM1 outdoor speakers
- Cablecraft panel wiring accessories
- CoolAutomation CoolMaster bridge
- Crestron Reference in-ceiling speakers
- Crestron lighting modules (DIN-PWS60, DIN-CENCN2-POE, DIN-1DIMU4, DIN-8SW8-I, DIN-4DIMFLV4)
- Crestron Home OS
- Crestron TSW-1070R touchpanel
- Crestron TSR-310 remote
- Crestron GLS-OIRLCL-C-CN
- Crestron GLS-SIM
- Domotz network management
- Draytek V2866 router
- Excel rack accessories
- Foss LED tape
- FS Cables bulk cable
- Future Automation PS TV brackets
- Future Automation USM-ARC Sonos Arc bracket
- Future Automation lighting panels
- GJD Outdoor PIR
- Gude 8041-1 IP controlled power distribution unit
- Hikvision DS-2CD2387G2-LSU/SL 8MP 4K CCTV Cameras
- Hikvision I Series NVR
- Kordz bulk cable
- Kordz interconnects
- Luxul switches
- Origin Acoustics Speaker Prewire Kit BZ68 & BC68
- Orluna downlights
- Penn Elcom rack accessories
- Philips Hue coloured lights
- Sanus WSSAWM1 Sonos Arc bracket
- Sanus Component series racks
- Sky Q box
- Sonos Arc soundbars
- Sonos amps
- Sony TVs XR55A90J, XR65-A90J & XR65-A90K
- SurgeX SA-132 surge protection and power conditioning
- TDI Group rack accessories
- Techflex cable management
- Ubiquiti WiFi
- Velcro cable management
- Wago panel wiring accessories

